

AMENDMENTS TO THE CLAIMS

1. (Original) Apparatus for increasing the output of a laser, comprising:
a pump laser having an output beam defining a single beamline;
an optical parametric oscillator in the form of a ring laser having a nonlinear optical crystal aligned along said single beamline; and,
an optical parametric amplifier positioned to accept the output of said optical parametric oscillator and having a nonlinear optical crystal aligned along said single beamline.
2. (Original) The apparatus of Claim 1, wherein said ring laser has a number of mirrors, each angled at 45° to said single beamline.
3. (Original) The apparatus of Claim 2, wherein said mirrors include an input mirror to one side of the nonlinear optical crystal in said ring laser and an output mirror to the other side of said last-mentioned crystal.
4. (Original) The apparatus of Claim 3, wherein said input and output mirrors are dichroic mirrors.
5. (Original) The apparatus of Claim 4, wherein said input mirror is highly transmissive at the pump laser wavelength, wherein said ring laser develops a signal and wherein said input mirror is highly reflective at the signal wavelength.

6. (Original) The apparatus of Claim 5, wherein said ring laser develops an idler and wherein said output mirror is highly transmissive at the pump and idler wavelengths and reflective at the signal wavelength.

7. (Original) The apparatus of Claim 1, wherein said nonlinear optical crystals include KTP crystals.

8. (Previously amended) The apparatus of Claim 1, wherein the output from said optical parametric amplifier is in the eye-safe region of the electromagnetic spectrum.

9. (Previously amended) The apparatus of Claim 8, wherein said eye-safe region is in the 1.5-micron band.

10. (Previously amended) The apparatus of Claim 8, wherein said eye-safe region is in the 3-micron band.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)